Welcome (back) to Ft. Hood, TEXAS!

Environmental Overview

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DPW-ENV, Trainer

287-8755

What We’re Covering Today

- General Ft. Hood Environmental
- Motor Pool Specific
- Training Land Use
- Things that have changed – and haven’t changed…

Fort Hood, Texas

- We're really, really big
- We're the largest holding of federal land in the state (so people are always watching us)
- We have 2 endangered species
- We have a strong environmental program
- We're not in Iraq anymore, Toto!

Some interesting things about our Environment

- Our land has a shallow topsoil layer over caliche (like white clay)
- Our water drains into Belton and Stillhouse Lakes, which is where our drinking water comes from
- Our Air - Austin air quality is bad enough to require special state regulation
- We spend a lot of time and money keeping the land good enough for training
- We are one of the largest producers of hazardous waste in the area
- We have our own landfill

Texas and Ft. Hood – long term partners

- Texas gives us permits for:
  - Air
  - Storm Water
  - Used Products and Hazardous Waste
  - Landfill
- DPW-ENV keeps track of our progress
- There are things we can and can't do because of those permits
- TCEQ is the State EPA

Texas Commission on

Environmental Quality

Environmental Management on Ft. Hood

- **Compliance** – doing what's legally required
- **Conservation** – keeping our air, water, plants, animals and soil safe
- **Restoration** – repairing past damage
- **Prevention** – take advance measures against possible or probable environmental mishaps

What DPW-Environmental does to help

- Seed and enhance the land to control erosion
- Monitor and test water going into Belton and Stillhouse Lakes
- Work with the state to keep our air clean
- Give rules and guidance for keeping the land in good condition
- Work to prevent making hazardous waste and help you dispose of used products correctly
- Help you keep stuff from going into the landfill

Environmental Things Commanders get to do:

- **Appoint** an Environmental Compliance Officer (ECO)
- Make sure Pollution Prevention **inspections** happen – the right way
- Provide Awareness and **Training**
- **Request** Assistance from DPW-ENV
- Get Pollution Prevention **Supplies**
- Provide policing and **maintenance** of all lands
- Consider effects to the environment (**dig permits** are most common aspect of this)

"...soldiers and leaders alike must make a personal commitment to uphold established environmental regulation and policies."

— Lt. Gen. Thomas F. Metz
III Corps, Fort Hood Commander

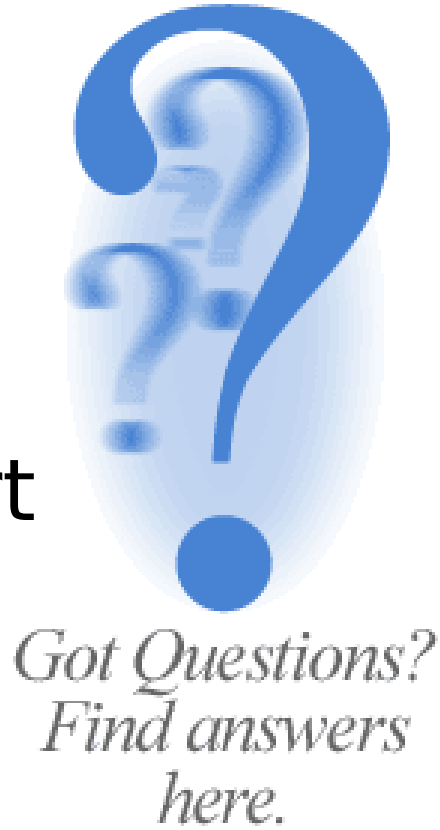
Some general Environmental things You get to do:

- Stay on roads when not tactical - don’t drive over trees
- Fill holes back in
- Recycle

- Throw used grease (cooking) away in the regular trash – don’t pour it down the sink
- Clean up after yourself
- Stay off the grass
- Everything has a *right way* to get rid of it - oil, trash, etc. –

Questions so far?

- Environmental protection is a part of our daily operations
- Everyone gets to do their part
- DPW-ENV works with the state, EPA, DoD, DA and everyone else, especially you!



Let’s Talk about Training

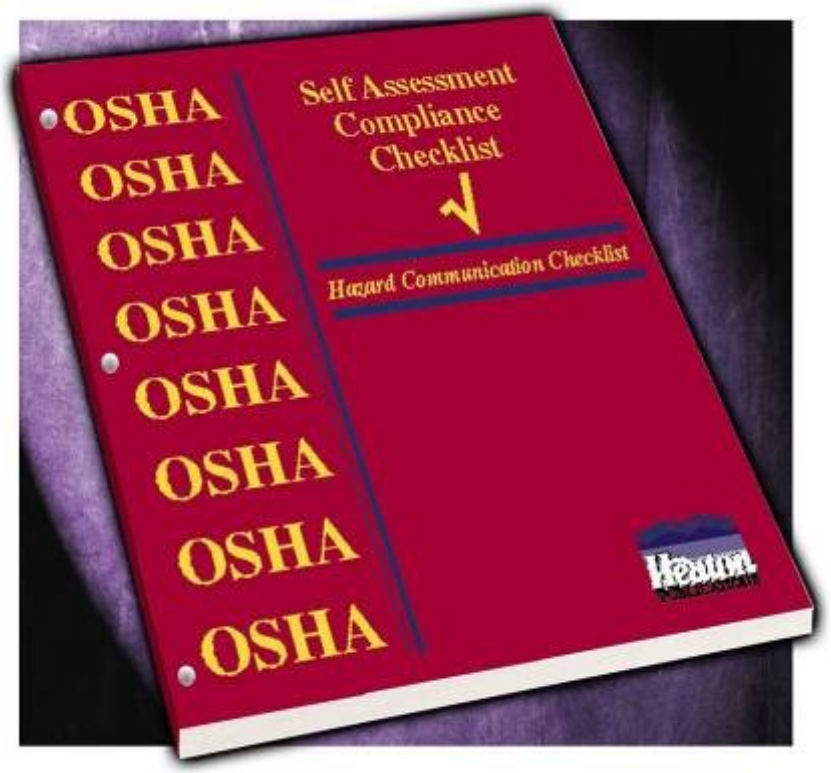
Initial, **M**onthly, **Q**uarterly or **A**nnual:

Legal driver or in a permit:

- (I, A) HAZCOM, 29CFR1900.1200 - get this from III Corps Safety, 287-3343
- (I, A) Storm Water Pollution Prevention
- (I, Q) Pollution Prevention
- (Q) Environmental Awareness
- (M) Spill Response /Prevention

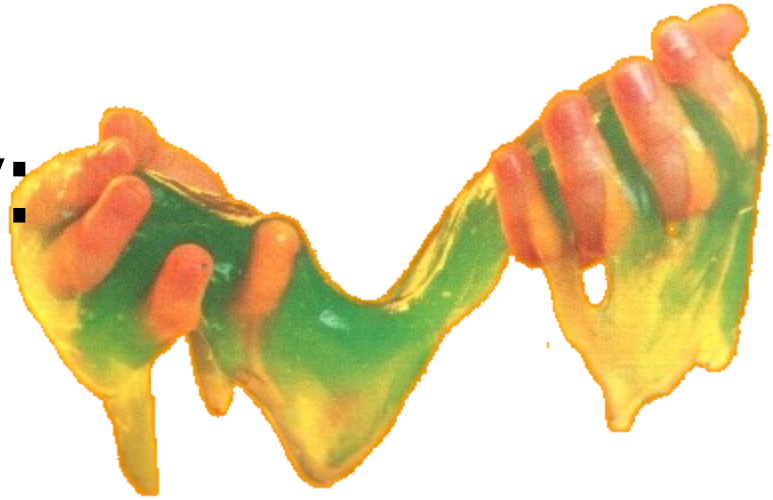
HAZARD COMMUNICATION STANDARD

OSHA Title 29 CFR, section 1910.1200, the ‘Right to Know’ Law



- ***You have the right to know what chemicals you work with*** and:
- How to work safely with those chemicals

III Corps Safety:
SLIME



- (S)OP - A written program must be in place.
- (L)ABELS - All containers must be properly labeled.
- (I)NVENTORY - Must be current and complete.
- (M)SDSs - Must be ‘readily available’ for all HazMat
- (E)DUCATION - Initial, Annual, Recurring.

Spill Training: The Basics

1. Safety First – Don't be a Hero
2. Call the Fire Department
3. Contain the spill *IF POSSIBLE*
4. Evacuate if needed

Prevention Basics
Spill Prevention

- Store hazmat/POL on secondary containment
- Use drip pans or pads (a must in cantonment and in field as practical)
- No POL dumping (no dumping into OWS!)
- Report spills to Fire Department: 287-3908 or 117

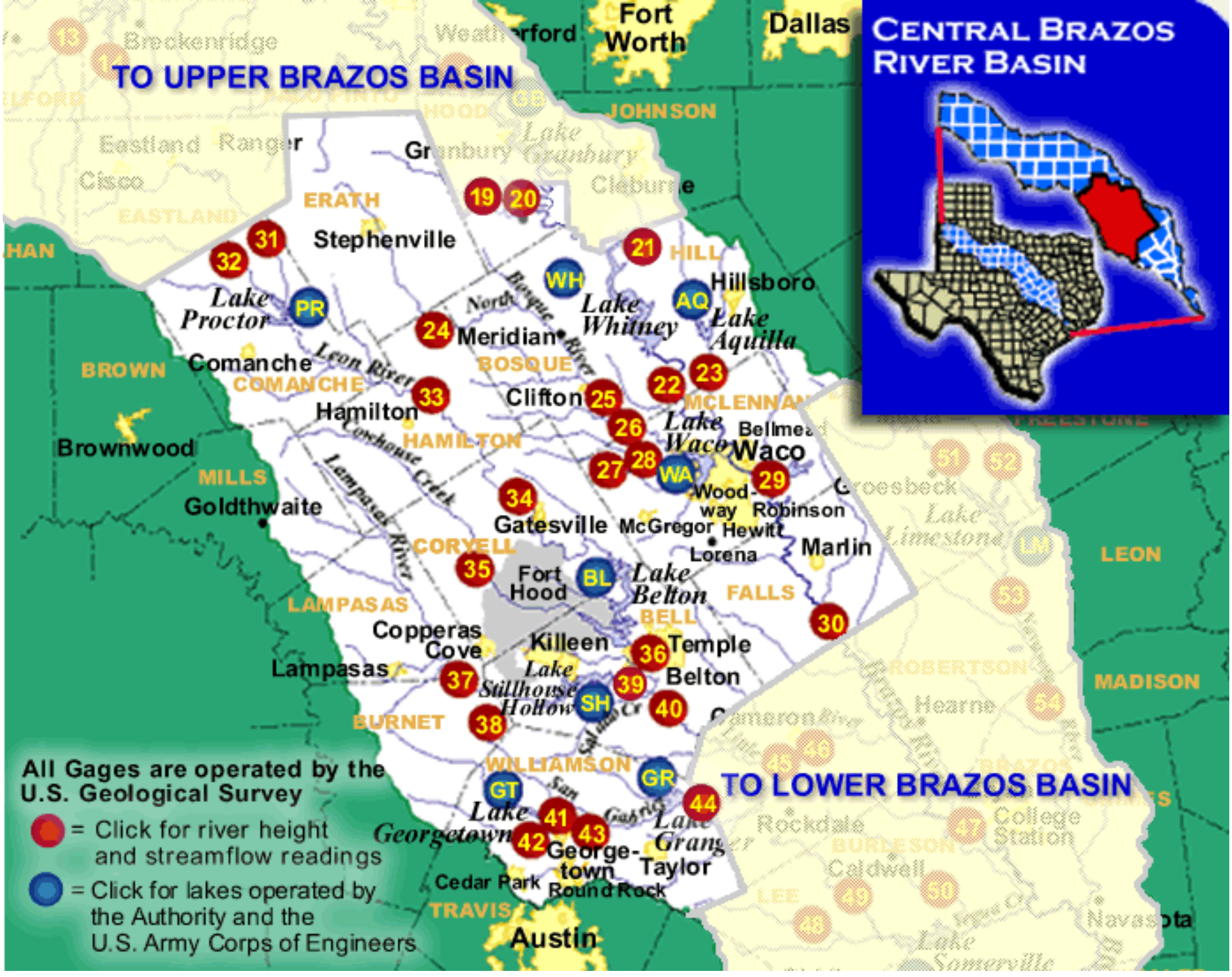
Some Environmental Awareness: Dig Permits

Digging has a serious effect on the environment:

- Endangered Speci
- Archaeological considerations
- Land Managemen
- Utilities and Pipeli
- Law requires it!

Storm Water Pollution:

- **Caused by**
  - **Vehicle fluids**
  - **Trash, debris, soil and dirt**
  - **Metals**
  - **Pesticides and fertilizers**
- **Polluted storm water can:**
  - **Damage recreational water areas (i.e. Belton Lake)**
  - **Harm/kill fish, wildlife, and native vegetation**
  - **Pollute ground water and drinking water**


CENTRAL BRAZOS RIVER BASIN
TO UPPER BRAZOS BASIN
TO LOWER BRAZOS BASIN
Fort Worth
Dallas
Breckenridge
Eastland
Ranger
Cisco
Granbury
Lake Granbury
Cleburne
JOHNSON
HOOD
ERATH
EASTLAND
Stephenville
HILL
Hillsboro
Lake Proctor
PR
WH
Lake Whitney
AQ
Lake Aquilla
North Bosque River
Meridian
Comanche
Leon River
BROWN
COMANCHE
BOSQUE
Clifton
MCLENNAN
Hamilton
Lake Waco
Bellmead
Waco
HAMILTON
Brownwood
Lampasas River
Cowhouse Creek
MILLS
WA
Woodway
Robinson
Goldthwaite
Gatesville
McGregor
Hewitt
Lorena
Marlin
CORYELL
Fort Hood
BL
Lake Belton
FALLS
LAMPASAS
BELL
Copperas Cove
Killeen
Temple
Lampasas
Lake Stillhouse Hollow
SH
Belton
BURNET
WILLIAMSON
GT
GR
Lake Georgetown
Lake Granger
George-town
Taylor
Round Rock
Cedar Park
TRAVIS
Austin
LEON
ROBERTSON
MADISON
Hearne
Rockdale
College Station
Caldwell
BURLESON
LEE
Navasota
Lake Somerville
All Gages are operated by the U.S. Geological Survey
= Click for river height and streamflow readings
= Click for lakes operated by the Authority and the U.S. Army Corps of Engineers

The Environmental Compliance Officer – Your Buddy

- Most knowledgeable person in the unit
- Special Training (a full week)
- E6 and Up
- Representative of the Commander
  - Environmental Compliance is time consuming and too specialized for the Commander to effectively administer by themselves
  - Administer program as directed to by Commander

Hazardous Material Control

- Inventories – tell us what you have
  - Quarterly turn in to DPW-ENV on the 5th of the following quarter
  - So, next inventory due October 5th
- Buy from HazMart, not Walmart
- Store HazMat in correct area
- 7 day daily use stock recommended – buy once a week
- Hazardous material disposal – *everything* to the Classification Unit, 288-7627

hazmat

Chemical Storage – don't mix these!

Flammable

Acid *(Corrosive)* Base

Oxidizer

Compliance Basics:
Recycling & Composting

Recycling is ***mandatory*** on Fort Hood

- Green or Blue bins labeled for metal, cardboard, paper, plastic, etc
- Also: next to both commissaries and at Recycle Center (72nd and Railhead Dr.)

Untreated lumber goes to the compost center at the intersection of Turkey Run Road and Clark Road

Conservation Basics:
Natural & Cultural Resources

FH Form 420-X10 Coordination for Land Excavation (Dig Permits) Bldg 4612A

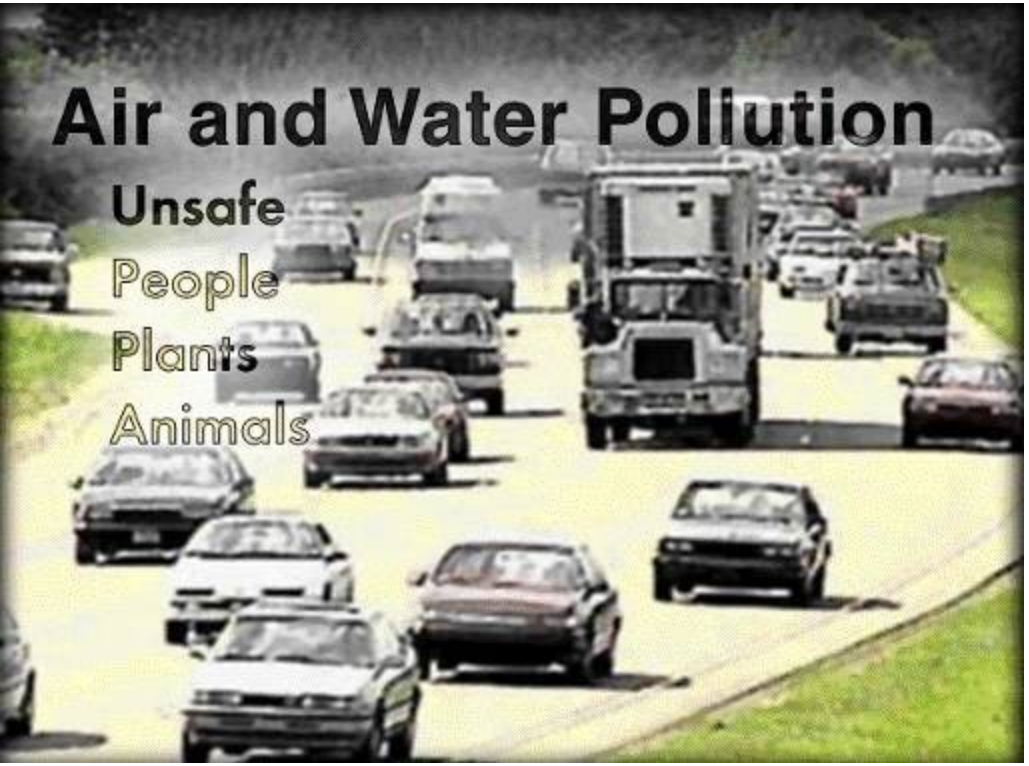
- If you have to go below the surface of the dirt (fox holes, fighting positions, tank defilade, ***everything***)
- Including the main cantonment and **grounding rods**

Endangered Species

- March 1 through August 31 (Breeding Season): limit time in habitat to 2 hours
- During the breeding season, no smoke or chem. within 100 m or upwind of habitat

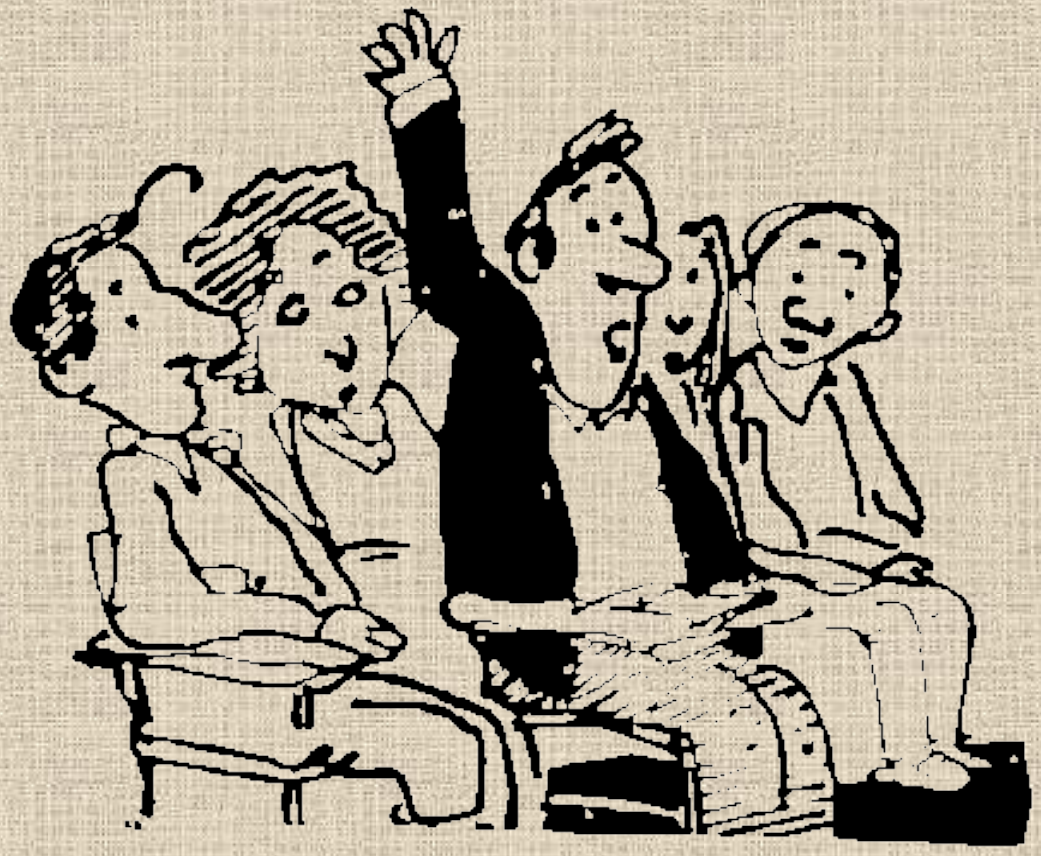
Conservation Basics:
Water & Air Protection

Texas State permits for Ft. Hood



- Use TVWF: 287-9012 or 288-3002
- Maintain the Oil Water Separator
- Keep the lids down on parts Washers

Questions?



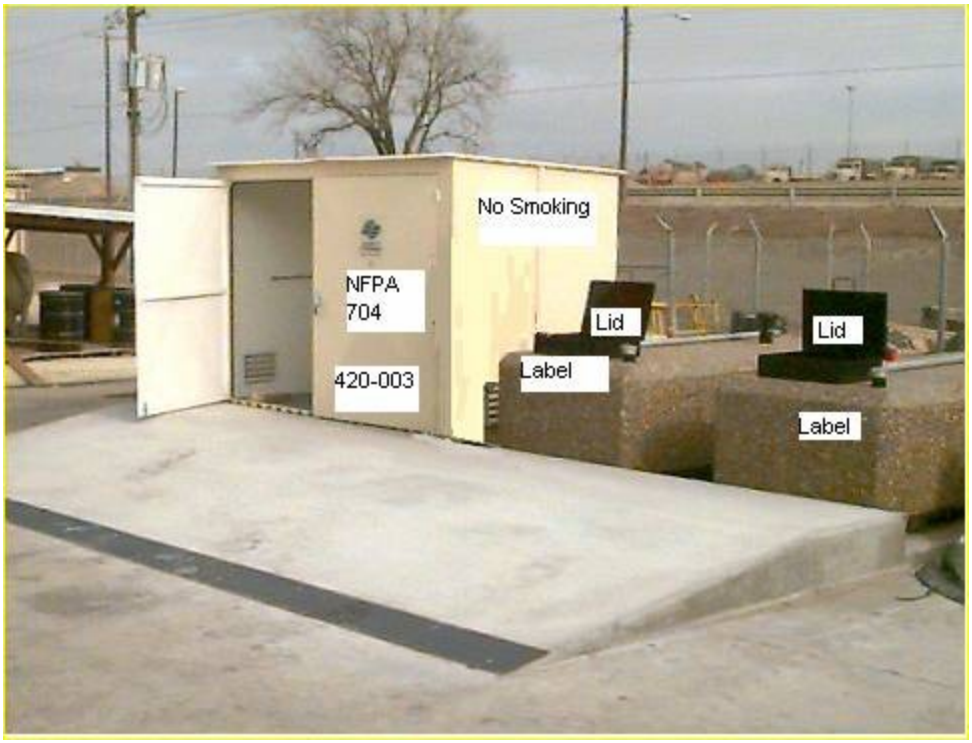
- Everyone gets HAZCOM training
- Protect our water supply
- Get Dig Permits
- Spill response – do *something* quickly
- Who can <u>you</u>

Ft. Hood Motor Pool Management

- *Huge* source of potential pollution
- Lots of rules and regulations
- Interested People:
  - Environmental
  - Safety
  - Fire Department
  - Industrial Hygiene

MOTOR POOL
4TH INFANTRY DIVISION
HHC 2ND BRIGADE
HHC 2ND BN 8TH INF
A CO 2ND BN 8TH INF
B CO 2ND BN 8TH INF
C CO 2ND BN 8TH INF
AFSC, 204TH FSB

The UPRP – Used Product Management



- Weekly inspections
- Daily inspections
- Documentation of inspections
- Everything has to be labeled!
- Keep all lids on/covers closed

What is “Used”

Spent products not classified as Hazardous Waste or are exempted from certain regulations because of their participation in recycling, reuse or recovery programs

This means that you, the unit, doesn’t have to pay to dispose of it as hazardous waste…

How do you manage "Used"

- Store properly – Secondary containment
- Train generators and handlers
- Segregate
- Label
- Turn in

UPRP Building

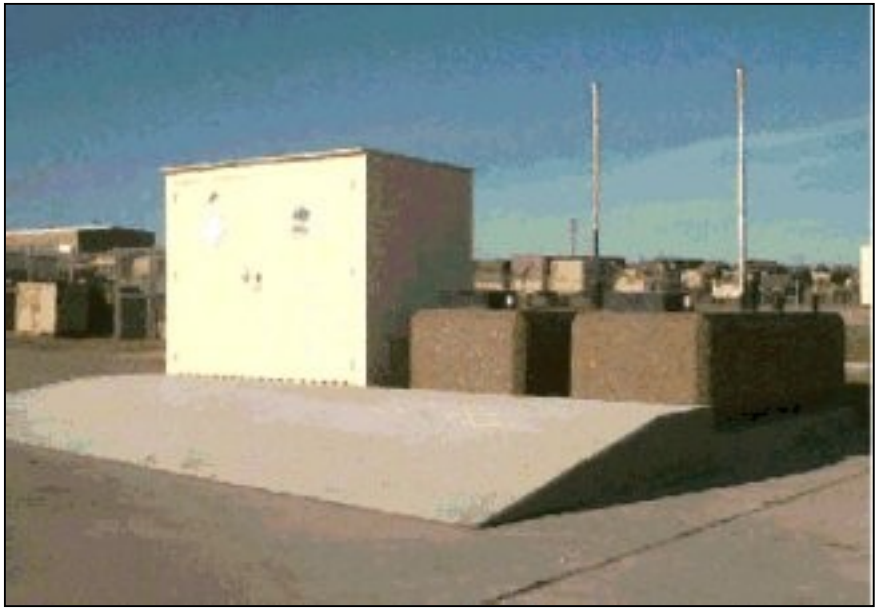
- Physical security
- Tank grounding
- Product segregation
- Fire extinguishers
- NFPA 704
- No Smoking signs
- In Case Of Spill signs

Inside Building

- Oil filters
- Fuel filters
- Grease
- Sweep able absorbents
- Poly pads
- Dirty rags *
- Spill kits
- SOPs

* This is new

Outside the building



- Empty containers – covered, lids & labels on secondary containment

- Soil – covered to protect from rain
- Flammable storage locker for paints/aerosols

Above Ground Storage Tanks

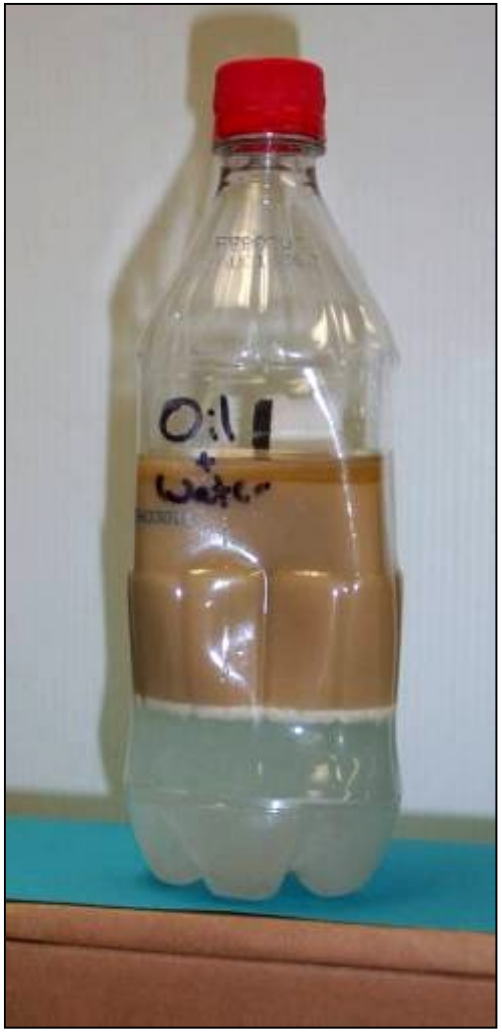
- Daily visual
- Weekly signed
- Gauges
- Grounding
- Spills
- Collection Screens

POL Shed

- Secondary containment
- Building grounding
- No Smoking signs, In Case Of Spill sign, and NFPA 704
- Weekly inspections,
- Recommended on-hand quantities
- Expiration dates and serviceable containers
- Labeling
- Inventories and MSDS
- Spill kits and Fire extinguishers
- Keep containers off ground

Oil and Water -

- Oil floats on water
- Oil Water Separator (OWS) in Motor pools holds water for oil to separate out



Oil, Soap and Water

- Soaps & Cleaners (degreasers) mix oil and water – won't ever separate out
- Contaminates oil or contaminates water
- Biggest problem is '*environmentally friendly*' cleaners on wash racks & floors having drain trenches
- Only okay for OWS is SC-1000 and LEW (@ HazMart)
- Steam cleaners are GREAT!

Oil Water Separator (OWS)

- Weekly inspections
- No dumping of POL or Steam cleaning on grates
- Things that can’t go into the OWS – antifreeze, etc.
- Solids at a MAXIMUM of 25% total depth
- Oil no more than 1”
- Remove trash (double bag – turn into CU)
- Weekly inspection
- Maintenance about every 4-6 months

OWS Drainage

- Evidence of cleaning compounds – milky fluid
- Evidence of illegal dumping – stained grates
- Just do the right thing!

Discharge goes into storm water

or

Into Sanitary Sewer where it harms the treatment process

Antifreeze and water do mix – so don’t let it get into the OWS or on

Outer Maintenance Bays

- Lids
- Labeling
- Secondary containment
- Spill clean up
- Solvent/cleaning compounds

Inside Maintenance Bays

- Daily use pallet
- Secondary containment use
- MSDS
- Labeling
- Containers with lids
- Flammable storage lockers
- Compatible storage
- Spill kits
- Absorbent use

Inside Maintenance Bays

- Parts washers to be signed for
- Keep lids closed
- Keep trash out
- No absorbent materials
- Use PPE

Have some old red parts washers? Turn them in, call 288-5264 for help.

Floor Drains
(some motor pools)

- Drains into Oil Water Separator
- Water okay ☺
- Debris (dirt, leaves, nuts and bolts) break pump ☹
- Solvents contaminate OWS

Batteries

- Lithium Discharging operations – don’t
- Automotive battery single stack & on spill pallets
- Turn regular alkaline (Duracell, Eveready, etc.) into the CU.

Throughout the Motor Pool

- MSDS where ever there's HazMat
- NFPA 704
- No Smoking
- In Case of Spill sign
- Lids
- Labels
- Drip pans/pads

Throughout the Motor Pool

- Scrap Metal
- Recycle
- Garbage

Scrap Wood/Metal

- These bins belong to the unit
- Units are responsible for empting them
- Metals to DRMO (check about De-Mil)
- Wood to Compost, Recycle, or Landfill

Pavement and Landscaping

- Clean up absorbents after done
- Protect pavement from oil – use drip pans
- Weed spraying done by pest management

Painting and Markings

No – you don’t do it (FH 420-27, page 32)

Put in a work order

Do not apply paint to:

- Brick
- Floor covering
- Metal or vinyl siding
- Ceramic tiles
- Asphalt pavements
- Ceiling panels
- Glass or fiberglass
- Wall paneling
- Sidewalks
- Curbs

Vehicles operated within the cantonment do not travel or *park* on:

- Seeded parade fields (except 1/4-ton wheeled vehicles used during ceremonies)
- Seeded soil
- Lawns and other grassed or landscaped areas
- Athletic courts and fields
- Unpaved land that does not support vehicular traffic

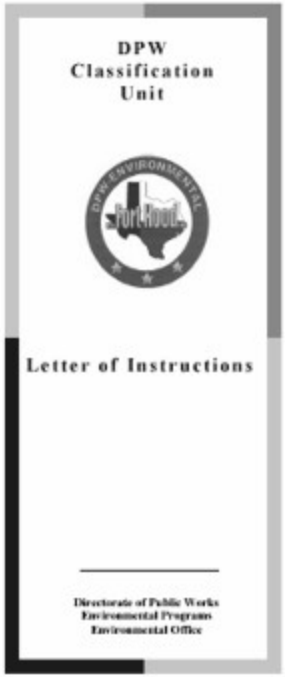
Note: The only exception to this restriction is for those vehic supporting authorized work on grounds, utilities, or facilities.

FH 420-27, para 7e

If You Can't Find the Road..... *Don't Drive!*

What else – any questions?

Letters of Instruction

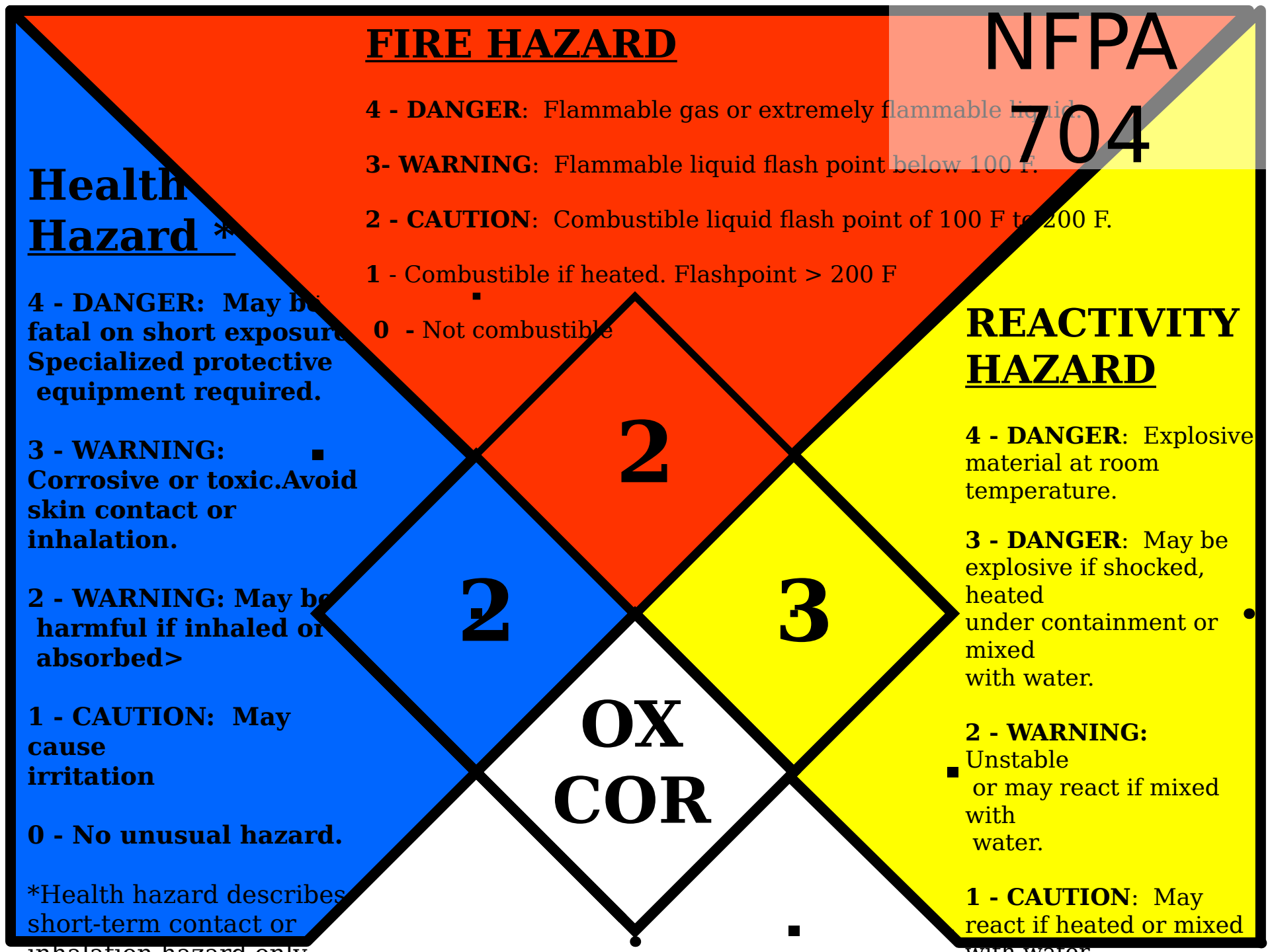


- **Classification Unit:** how to get rid of your used products and hazardous materials – the right way!

- **Used Product Reclamation Point** (UPRP): how to store your stuff until you get rid of it – the right way!

Weekly Checks

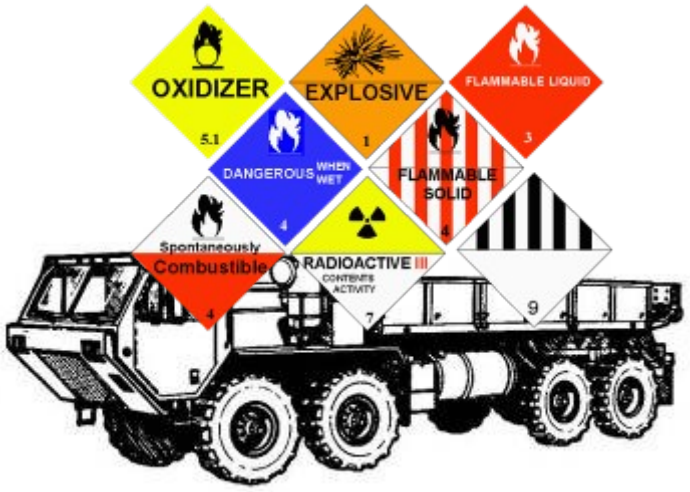
- *Recommended* Facility Checklist
- Daily visual, weekly documented:
  - New and used product storage areas
  - Oil water separators
  - Above ground storage tanks (Facility Response Plan forms 6.1 & 8.1)


NFPA
704
FIRE HAZARD
4 - DANGER: Flammable gas or extremely flammable liquid.
3- WARNING: Flammable liquid flash point below 100 F.
2 - CAUTION: Combustible liquid flash point of 100 F to 200 F.
1 - Combustible if heated. Flashpoint > 200 F
0 - Not combustible
Health Hazard *
4 - DANGER: May be fatal on short exposure. Specialized protective equipment required.
3 - WARNING: Corrosive or toxic.Avoid skin contact or inhalation.
2 - WARNING: May be harmful if inhaled or absorbed>
1 - CAUTION: May cause irritation
0 - No unusual hazard.
*Health hazard describes short-term contact or
REACTIVITY HAZARD
4 - DANGER: Explosive material at room temperature.
3 - DANGER: May be explosive if shocked, heated under containment or mixed with water.
2 - WARNING: Unstable or may react if mixed with water.
1 - CAUTION: May react if heated or mixed
2
2
3
OX
COR

Department of Transportation vs. NFPA 704

1. DOT Placards are for vehicles
2. NFPA Labels are for buildings

Don't put the wrong sign on

Buildings ONLY!	Vehicles ONLY!
	 OXIDIZER 5.1 EXPLOSIVE 1 FLAMMABLE LIQUID 3 DANGEROUS WHEN WET 4 FLAMMABLE SOLID 4 Spontaneously Combustible 4 RADIOACTIVE III 7 9

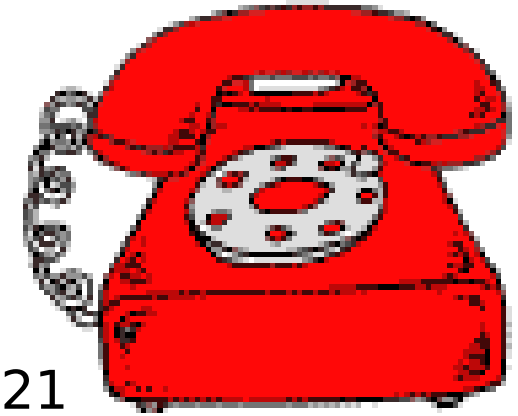
Some things that have changed:

- Household hazardous material collection center – June 04
- No glass for recycle collection – drop off only
- Tennis shoes and CD/DVDs can be recycled
- Don’t discharge your lithium batteries – June 04
- Above ground storage tank inspections, new form
- Compressed Gasses – say goodbye soon!

Points of Contact

254 area code

a) Anything: Environmental Compliance Assessment Team @ 287-9103/9105/9604
b) Dig Permits: April Sanchez @ 287-9735
c) OWS Servicing: 286-5993
d) HazMart: 287-2695
e) Classification Unit: (HazMat turn in) 288-7627
f) Recycle Support: 287-1606
g) Inventories: 287-8711/288-5262
h) DPW Work orders: 287-2113 or http://www.dpw.hood.army.mil/
i) Compost Center/Landfill: 287-9607 or 287-9621



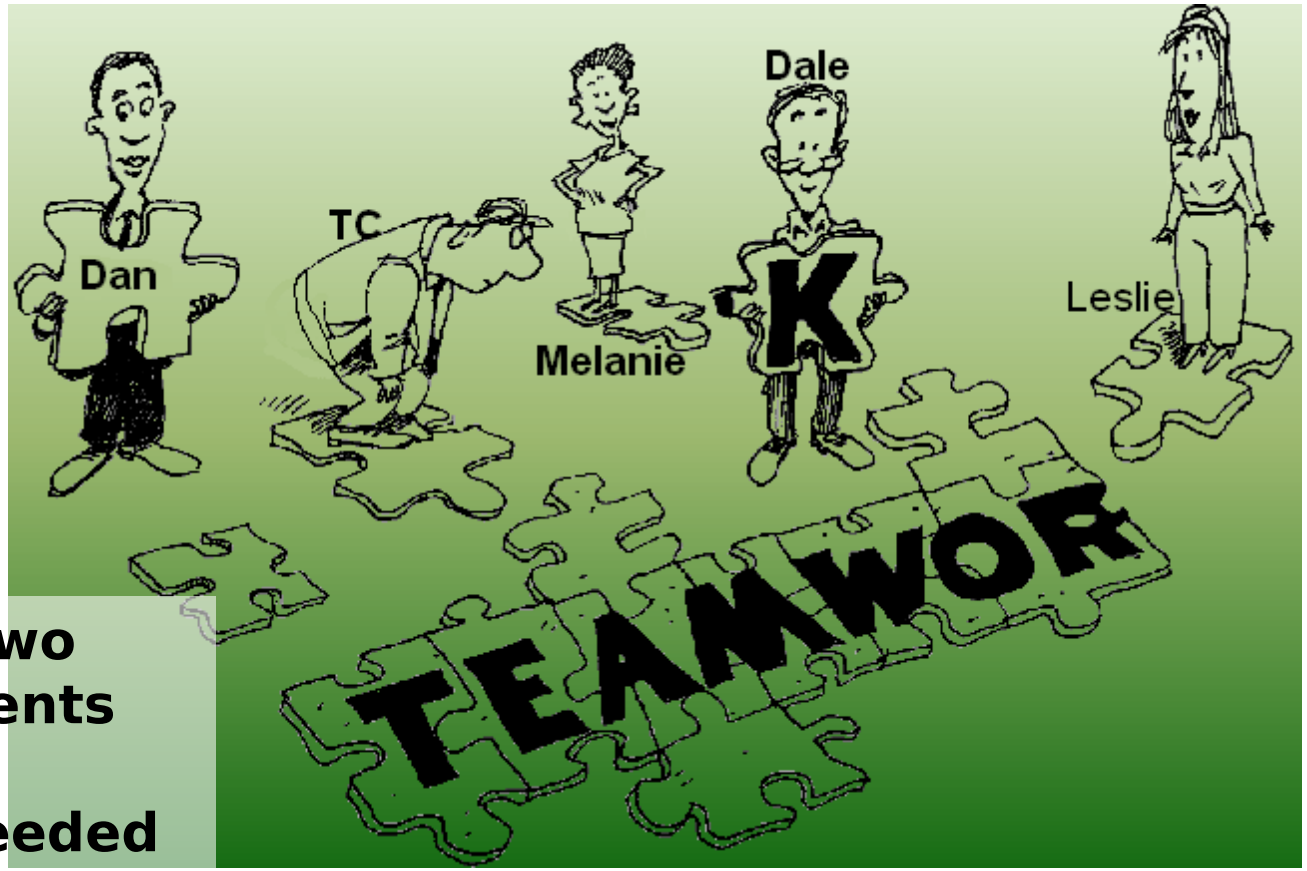
Environmental Compliance Assessment Team (ECAT)

Dale Frederick Tenant Activities , Team Leader
287-9103

Daniel Smart
1CD 287-9604

TC Coffman
4ID 287-9604

Melanie Ropati
13 CC, Separate Brigades 287-9105



Every unit has two formal assessments every year and assistance as needed

Questions?
Protect The Land As You Serve Your Country
Leslie McGaha
Environmental Trainer
DPW-Environmental
(254) 287-8755